

PFE ORIGINAL

Just updated
Nov 2011

Contaminant (ug/L)	Ex. 6 - Personal Privacy								New Risk based on Children's exposure
	Pre-drilling	Pre-drilling	Pre-drilling	Pre-drilling	Pre-drilling	Pre-drilling	Pre-drilling	Pre-drilling	
Aluminum			<10				55		16,000
Chloride	7900	12700	2950	5300	4600	<2000	10000	14000	Chlorite (Sodium salt) 470
Iron	30	11	<200	<5	120	<50	390	<50	11,000
Magnesium	5960	30	4600	4880	630	2270	6500		
Manganese			26				9.8	28	380
Methane									
Ethane									
Propane									
Iso -Butane									
n-Butane									
Ethene									
Arsenic			4.3						4.7
Contaminant (ug/L)	Ex. 6 - Personal Privacy								New Risk based on Children's exposure
	Post drilling	Post drilling	Post drilling	Post drilling	Post drilling	Post drilling	Post drilling	Post drilling	
Aluminum	6050	3140	31.4	4698	3290	3610	44100		16,000
Chloride	90700	156800	7880	62000	11900	5380	25500	14300	Chlorite (Sodium salt) 470
Iron	3390	4517	273	15500	24100	16060	18700	610	11,000
Magnesium	6979	13410	125600	9340	1550	8796	17700	6926	
Manganese	361	628	84	413	669	374	1920	118	380
Methane	19000	294000	56900	25000	64300	3610	5000	11500	
Ethane	979	920	2060	1280	1400	150	77	688	
Propane	24	39.2	98	48.3	10	0.17	0.41	39	
Iso -Butane	0.83	1.1	1.7	0.73	0.17	0.036	<.05	0.37	
n-Butane	1.2	1.7	6.3	1.8	0.046	0.067	<.05	1	
Ethene	27.4	58.6	ND	ND	ND	ND	ND	ND	
Arsenic	3.1	<1	<5	37	6.5	3.3	25	3.3	4.7

Identified Pollutants of Concern

Exceedences of federal and/or state drinking water standards

- Aluminum
- Iron
- Lead
- Manganese
- Toluene
- Barium
- Beryllium

High levels of other contaminants for which safe levels have not yet been established

- Naphthalene
- Phenanthrene
- Butyl benzyl phthalate
- 1-methylnaphthalene
- 2-methylnaphthalene
- Diethylene glycol
- Triethylene glycol
- 2-methoxyethanol
- Bis (2-Ethylhexyl) adipate
- Bis (2-Ethylhexyl) phthalate
- Methylene blue active substances
- Gas range organics
- Acetone
- Ammonia

Chemicals for which levels have not been established are not safe for ingestion, short or long term.

Ethylene glycol was detected in one home where a methane treatment system was installed.

Explosive levels of thermogenic natural gas.

Response: On December 7, 2011, EPA's Region III Office formally requested the performance of a health consultation by the Agency for Toxic Substances and Disease Registry (ATSDR), a public health agency of the U.S. Department of Health and Human Services. ATSDR routinely performs health consultations where investigation is warranted to determine the extent and risk of exposures to environmental hazards, and to provide appropriate public health and epidemiologic expertise to affected populations.

An ATSDR health consultation is a review of available information, or collection of new data, to respond to a specific health question or request for information about a potential environmental hazard. Health consultations are focused on a specific exposure issue. Health consultations are therefore more limited than a public health assessment, which reviews the exposure potential of each pathway and chemical.

December 6, 2011 Open Letter to EPA Regarding Dimock, PA
December 8, 2011
- Key Points-

Call for Intervention

Groundwater contamination related to hydraulic fracturing for gas development is widespread
(“Dozens of extreme cases”, “hints into hundreds if not thousands more”)

- Water with explosive levels of thermogenic natural gas
- Water has tested positive for industrial fracking chemicals
- Water made animals and residents sick after drinking

Want investigation by PA inspector general

- PADEP failure to fulfill regulatory responsibility
- Undue influence of oil and gas interests in PA
 - o Move away from water line coincided with change in administration in PA
 - o Not holding Cabot responsible for continued water provision
 - o PA government influenced by campaign contributions and lobbying
 - o Local officials have colluded with industry. (Denial of Binghampton assistance)

EPA should intervene and ensure relief

- EPA’s decision not to act was based on a partial review of data with not independent testing by EPA, using flawed data provided by Cabot and the DEP.
- Some results reported by Cabot are for samples that are not representative due to method of collection, and the method of collection may have caused lower reported levels of lead, iron, and manganese.
- Suggest investigation similar to Pavillion, Wyoming investigation.
- Want EPA to stand behind May 2011 statement: “EPA will step in to protect local residents if a driller jeopardizes clean water and the state government does not act”